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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,291	02/19/2004	Pedro R. Marques	1014-078US01/JNP-0330	4288
72689 7590 11/12/2008 SHUMAKER & SIEFFERT, P.A. 1625 RADIO DRIVE, SUITE 300 WOODBURY, MN 55125				
EXAMINER SHAND, ROBERTA A				
ART UNIT		PAPER NUMBER		
2416				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pairedocketing@ssiplaw.com

Office Action Summary

Application No.

10/782,291

Applicant(s)

MARQUES, PEDRO R.

Examiner

Roberta A. Shand

Art Unit

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-91 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-91 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
- Paper No(s)/Mail Date 7/8/2008.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 16, 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Peterson (U.S. 7421487 B1)

3. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

4. Regarding claim 1, Peterson teaches (fig. 4) a method comprising: defining a flow specification data type for a routing protocol, wherein the flow specification data type allows a variable number of packet flow attributes to be specified (col. 9, line 44 – 57); generating a message that encodes traffic flow criteria in accordance with the flow specification data type (col. 9, line 58 – col. 10, line 14); and communicating the message to a routing device to direct

the routing device to control network traffic based on the traffic flow criteria (col. 10, line 15-65).

5. Regarding claims 9, 26, 37, 51, 60, 68 and 71, Peterson teaches (fig. 4) redefining a preexisting data type of the routing protocol to define the flow specification data type.

6. Regarding claims 10, 27, 44, 53, 61, 69, 74, 77, 80, 83, 86 and 89, Peterson teaches (fig. 4) defining a flow specification data type comprises defining the flow specification data type as an application-specific data type in accordance with the routing protocol.

7. Regarding claim 16, Peterson teaches (fig. 4) a method comprising: receiving a routing communication that encodes traffic flow criteria in accordance with a flow specification data type for a routing protocol (col. 9, line 58 – col. 10, line 14), wherein the flow specification data type allows a variable number of packet flow attributes to be specified; and controlling network traffic in accordance with the traffic flow criteria (col. 10, line 15-65).

8. Regarding claim 32, Peterson teaches (fig. 4) a network device comprising: a control unit to generate a message that encodes traffic flow criteria in accordance with a flow specification data type, wherein the flow specification data type allows a variable number of packet flow attributes to be specified (col. 9, line 44 – 57); and an interface card to communicate the message to a routing device in accordance with a routing protocol, wherein the message directs the control

unit to apply an appropriate action on network traffic based on the traffic flow criteria (col. 10, line 15-65).

9. Regarding claim 39, Peterson teaches (fig. 4) a network device comprising: an interface card to receive routing communication that encodes traffic flow criteria in accordance with a flow specification data type for a routing protocol, wherein the flow specification data type allows a variable number of packet flow attributes to be specified (col. 9, line 44 – 57); and a control unit to compare network traffic to the traffic flow criteria, and apply an appropriate action to the network traffic (col. 10, line 15-65).

10. Regarding claim 46, Peterson teaches (fig. 4) a system comprising: a first network device to generate a message that encodes traffic flow criteria in accordance with a flow specification data type, and communicate the message to a second routing device via a routing protocol, wherein the flow specification data type allows a variable number of packet flow attributes to be specified (col. 9, line 44 – 57); and a second network device to receive the message, compare network traffic to the traffic flow criteria, and apply an appropriate action to the network traffic based on the traffic flow criteria (col. 10, line 15-65).

11. Regarding claim 55, Peterson teaches (fig. 4) a computer-readable medium comprising instructions for causing a programmable processor to: define a flow specification data type for a routing protocol, wherein the flow specification data type allows a variable number of packet flow attributes to be specified (col. 9, line 44 – 57); generate a message that encodes traffic flow

criteria in accordance with the flow specification data type (col. 9, line 58 – col. 10, line 14); and communicate the message to a routing device to direct the routing device to control network traffic based on the traffic flow criteria .

12. Regarding claim 63, Bays teaches (fig. 1) a computer-readable medium comprising instructions for causing a programmable processor to: receive a routing communication that encodes traffic flow criteria in accordance with a flow specification data type for a routing protocol (col. 4, line 22 – 54), wherein the flow specification data type allows a variable number of packet flow attributes to be specified; and control network traffic in accordance with the traffic flow criteria (col. 10, line 15-65).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson in view of Bays (U.S. 7139242 B2).

15. Regarding claims 2, 18, 33, 41, 47, 56, and 65, Peterson does not teach defining the flow specification data type as information associated with a route advertised by the message.

16. Bays teaches (col. 16, line 63 – col. 17, line 11) defining the flow specification data type as information associated with a route advertised by the message. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Peterson to include Bays route advertise to ensure all device receive the routing information.

17. Regarding claims 3, 19, 34, 42, 48, 57 and 66, Bays teaches (col. 17, line 12 – col. 18, line 24) defining a flow specification data type comprises defining the flow specification data type as network layer reachability information (NLRI) that is associated with a route advertised by the message.

18. Regarding claim 4 and 20, Bays teaches (col. 17, line 12 – col. 18, line 24) defining a flow specification data type comprises defining the flow specification type to include a length field that indicates the number of packet flow attributes specified.

19. Regarding claims 5 and 21, Bays teaches (col. 17, line 12 – col. 18, line 24) the flow specification data type including multiple subcomponents, wherein defining a flow specification data type comprises defining each of the subcomponents to include a subcomponent type field and a set of value fields.

20. Regarding claim 6, Bays teaches (col. 17, line 12 – col. 18, line 24) defining a subcomponent for specifying a destination prefix.

21. Regarding claims 7, 35, 49, and 58, Bays teaches (col. 20, line 64 – col. 21, line 16) defining subcomponents for specifying a destination prefix, a source prefix, a protocol, a source port, a destination port, an ICMP type, and a packet length.

22. Regarding claims 8, 25 36, 43, 50, 59, 67, 72, 75, 78, 81, 84, 87 and 90, Bays teaches (col. 17, line 12 – col. 18, line 24) the routing protocol is the Border Gateway Protocol (BGP).

23. Regarding claims 11, 28, 38, 45, 54, 62, 70, 73, 76, 79, 82, 85, 88 and 91, Bays teaches (col. 7, lines 31-64) assigning an application-specific identifier to the flow specification data type to direct the router to install the traffic flow criteria within an independent routing information base (RIB).

24. Regarding claims 12 and 29, Bays teaches (col. 7, lines 31-64) assigning an application-specific identifier to the flow specification data type; and configuring a policy to selectively enable distribution of the traffic flow criteria based on the application-specific identifier.

25. Regarding claims 13 and 30, Bays teaches (col. 7, lines 31-64) assigning an application-specific identifier comprises assigning an Address Family Identifier (AFI) and Subsequent Address Family Identifier (SAFI) to the flow specification data type.

26. Regarding claim 14, Bays teaches (fig. 1) the traffic flow criteria specifies an appropriate action that is performed on the network packet.

27. Regarding claims 15, 17, 22 40, 52, 64 and 64, Bays teaches (fig. 9A) the appropriate action includes one of load balancing, rate limiting, and filtering.
28. Regarding claim 23, Bays teaches (fig. 6A, 508) the routing communication further specifies a route to a network destination, the method further comprising: comparing the specified route to a routing information base; and rejecting the traffic flow criteria based on the comparison when the route does not specify a preferred path to the network destination.
29. Regarding claim 24, Bays teaches (fig. 1) receiving a routing communication comprises communicating with a router in accordance with the routing protocol.
30. Regarding claim 31, Bays teaches (fig. 1) updating a log that includes information about the routing communication.

Response to Arguments

31. Applicant's arguments with respect to claims 1-91 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERTA A. SHAND whose telephone number is (571)272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roberta A. Shand
/R. A. S./
Examiner, Art Unit 2416

/FIRMIN BACKER/
Supervisory Patent Examiner, Art Unit 2416